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FORM**

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Total Number of Pages in This Submission 149

Application Number 10/611,440

Filing Date 07/01/2003

First Named Inventor Berinstein, N.

Art Unit 1643

Examiner Name Chandas L. Macias

Attorney Docket Number API-02-11-US

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
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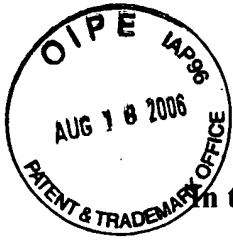
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Signature			
Printed name	Patrick J. Halloran		
Date	08/16/2006	Reg. No.	41,053

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. API-02-11-US)

In the Application of:

Berinstein, et al.

Serial No.: 10/611,440

Filed: 07/01/2003

For: TUMOR ANTIGENS BCZ4 AND BCY1)
FOR PREVENTION AND / OR)
TREATMENT OF CANCER)

Examiner: Chandas L. Macias

Art Unit: 1643

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Arlington, VA 22313-1450

U.S. Express Mail No. ER002857516US

Dear Sir:

Applicants respectfully submit this Information Disclosure Statement, PTO-1449 and copies of the reference cited therein. This Information Disclosure Statement is in compliance with the duty of candor as set forth in 37 C.F.R. § 1.56. It is requested that the documents be given careful consideration and that they be cited of record in the prosecution history of the present application so that they will appear on the face of the patent issuing of the present application.

In the judgment of the undersigned, portions of the references may be material to the examination of the pending claims. However, the references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This Statement is not a representation that the cited references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. §102 or §103.

CITED REFERENCES

U.S. Patents

1. US 6,780,586 B1

Other Documents:

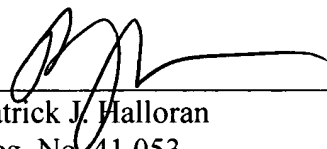
1. NCI GenBank database Accession No. AF183810, "Homo sapiens zinc finger transcription factor TRPS1 mRNA, complete cds."
2. NCI GenBank database Accession No. AAF23614, "zinc finger transcription factor TRPS1 [Homo sapiens]"
3. Momeni, P. et al. Mutations in a new gene, encoding a zinc-finger protein, cause tricho-rhino-phalangeal syndrome type I. *Nat Genet* 24, 71-4 (2000)
4. Malik, et al. Deletion of the GATA domain of TRPS1 causes an absence of facial hair and provides new insights into the bone disorder in inherited tricho-rhino-phalangeal syndromes. *Mol Cell Biol* 22, 8592-600 (2002)
5. Ludecke, H.J. et al. Genotypic and phenotypic spectrum in tricho-rhino-phalangeal syndrome types I and III. *Am J Hum Genet* 68, 81-91 (2001)
6. Kaiser, F.J. et al. Novel missense mutations in the TRPS1 transcription factor define the nuclear localization signal. *Eur J Hum Genet* 12, 121-6 (2004)
7. Ginestier, C. et al. Distinct and complementary information provided by use of tissue and DNA microarrays in the study of breast tumor markers. *Am J Pathol* 161, 1223-33 (2002)
8. Kobayashi, H. et al. Missense mutation of TRPS1 in a family of tricho-rhino-phalangeal syndrome type III. *Am J Med Genet* 107, 26-9 (2002)
9. Gentile, et al. A novel mutation in exon 7 in a family with mild tricho-rhino-phalangeal syndrome type I. *Clin Genet* 63, 166-7 (2003)
10. Hatamura, I. et al. A nonsense mutation in TRPS1 in a Japanese family with tricho-rhino-phalangeal syndrome type I. *Clin Genet* 59, 366-7 (2001)
11. Chang, G.T. et al. Differentially expressed genes in androgen-dependent and -independent prostate carcinomas. *Cancer Res* 57, 4075-81 (1997)
12. Kunath, M., Ludecke, H.J. & Vortkamp, A. Expression of Trps1 during mouse embryonic development. *Mech Dev* 119 Suppl 1, S117-20 (2002)
13. Malik, T.H. et al. Transcriptional repression and developmental functions of the atypical vertebrate GATA protein TRPS1. *Embo J* 20, 1715-25 (2001)
14. Chang, G.T. et al. Characterization of a zinc-finger protein and its association with apoptosis in prostate cancer cells. *J Natl Cancer Inst* 92, 1414-21 (2000)
15. Kaiser, et al. The RING finger protein RNF4, a co-regulator of transcription, interacts with the TRPS1 transcription factor. *J Biol Chem* 278, 38780-5 (2003)
16. Tremblay, J.J. & Viger, R.S. Novel roles for GATA transcription factors in the regulation of steroidogenesis. *J Steroid Biochem Mol Biol* 85, 291-8 (2003)
17. Savinainen, et al. Expression and copy number analysis of TRPS1, EIF3S3 and MYC genes in breast and prostate cancer. *Br. J. Cancer* 90, 1041-1046 (2004)

18. Williams, et al. Analysis of differential protein expression in normal and neoplastic human breast epithelial cell lines. Electrophoresis, 19: 333-343 (1998)
19. DeRisi, et al. Use of a cDNA microarray to gene expression patterns in human cancer. Nature Genetics 14: 457-460 (1996)
20. Welford, et al. Detection of differentially expressed genes in primary tumor tissues using representational differences analysis coupled to microarray hybridization. Nucleic Acids Research 26(12): 3059-3065 (1998)
21. Khan, et al. Expression profiling in cancer using cDNA microarrays. Electrophoresis 20: 223-229 (1999)
22. Radvanyi, et al. The gene associated with trichorhinophalangeal syndrome in humans is overexpressed in breast cancer. PNAS 102(31): 11005-11010 (2005)

Respectfully Submitted,

Date: August 16, 2006

By: _____


Patrick J. Halloran
Reg. No. 41,053

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Center Valley, PA 18034
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	4
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Complete if Known

Application Number	10/611,440
Filing Date	07/01/2003
First Named Inventor	N. Berinstein
Art Unit	1643
Examiner Name	Chandas L. Macias
Attorney Docket Number	API-02-11-US

U. S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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		Application Number	10/611,440
		Filing Date	07/01/2003
		First Named Inventor	N. Berinstein
		Art Unit	1643
		Examiner Name	Chandas L. Macias
Sheet 2	of 4	Attorney Docket Number API-02-11-US	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	NCI GenBank database Accession No. AF183810, "Homo sapiens zinc finger transcription factor TRPS1 mRNA, complete cds."	
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	3	Momeni, P. et al. Mutations in a new gene, encoding a zinc-finger protein, cause tricho-rhino-phalangeal syndrome type I. Nat Genet 24, 71-4 (2000)	
	4	Malik, et al. Deletion of the GATA domain of TRPS1 . . . Mol. Cell. Biol. 22, 8592-600 (2002)	
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	6	Kaiser, F.J. et al. Novel missense mutations in the TRPS1 transcription factor define the nuclear localization signal. Eur J Hum Genet 12, 121-6 (2004)	
	7	Ginestier, C. et al. Distinct and complementary information . . Am J Pathol 161, 1223-33 (2002)	
	8	Kobayashi, H. et al. Missense mutation of TRPS1 in a family of tricho-rhino-phalangeal syndrome type III. Am J Med Genet 107, 26-9 (2002)	
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	11	Chang, G.T. et al. Differentially expressed genes in androgen-dependent and -independent prostate carcinomas. Cancer Res 57, 4075-81 (1997)	
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